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(71) Applicant (for all designated States except US): **MAT-SUSHITA ELECTRIC INDUSTRIAL CO., LTD.** [JP/JP]; 1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8501 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SATO, Junichi** [JP/JP]; 460-310, Nogaya-machi, Machida-shi,

Tokyo 195-0053 (JP). **YAMAGUCHI, Takao** [JP/JP]; 7-23-6-201, Tamagawagakuen, Machida-shi, Tokyo 194-0041 (JP). **TADA, Hiroyuki** [JP/JP]; 2-12-3-302, Seki, Tama-ku, Kawasaki-shi, Kanagawa 214-0022 (JP). **TANIGUCHI, Koji** [JP/JP]; 11-1-502, Ichibashimo-cho, Tsurumi-ku, Yokohama-shi, Kanagawa 230-0024 (JP). **TAKEI, Ichiro** [JP/JP]; 2-4-10-208, Matsunoki, Sugami-ku, Tokyo 166-0014 (JP).

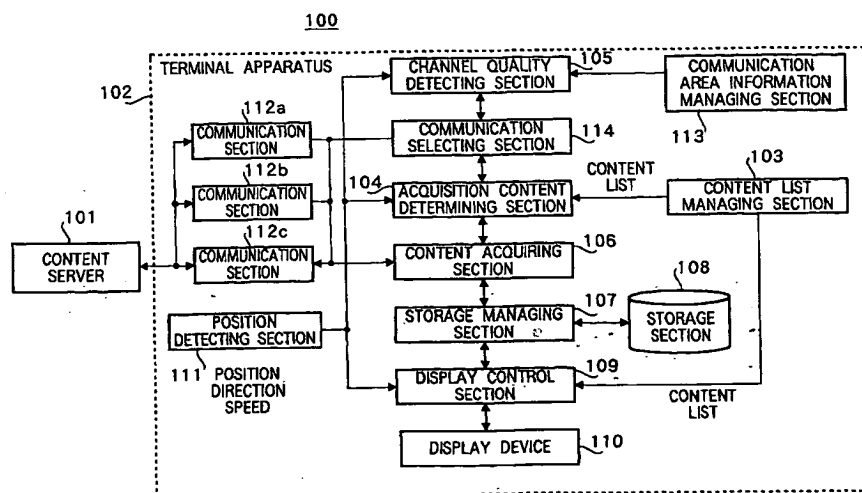
(74) Agent: **WASHIDA, Kimihito**; 5th Floor, Shintoshicenter Bldg., 24-1, Tsurumaki 1-chome, Tama-shi, Tokyo 206-0034 (JP).

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[Continued on next page]

(54) Title: **TERMINAL APPARATUS AND INFORMATION ACQUIRING SYSTEM**



(57) Abstract: In the present invention, with respect to content that is predicted to be referred to after moving based on a current position, moving direction and/or moving speed of a terminal apparatus, the terminal apparatus inquires of a communication information area managing section whether a position associated with the content is in a communication area, and when the position is outside the communication area, selects at least one communication section with communication-capable channel quality, and acquires and stores the content predicted to be referred to using the selected communication section. It is thereby possible to refer to the content when a position in response to the content predicted to be referred to is outside a communication-capable area.



ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
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A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 1 209 930 A (DAIMLER CHRYSLER AG) 29 May 2002 (2002-05-29) abstract; claim 1; figures 4,5,8,9 column 17, line 12 - line 49 column 23, line 45 - column 24, line 27	1-15
Y	WO 99/59363 A (UNIV CARNEGIE MELLON) 18 November 1999 (1999-11-18) abstract; claims 1-3 page 16, line 17 - page 17, line 9	1-15
Y	WO 01/31945 A (TELCORDIA TECH INC) 3 May 2001 (2001-05-03) abstract; figures 4a,4b page 9, line 13 - line 32	1,14,15
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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Danielidis, S

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2002/085516 A1 (BRIDGELALL RAJ) 4 July 2002 (2002-07-04) abstract; figures 12,13 page 8, paragraph 75 page 9, paragraph 87 -----	1, 14, 15
A	WO 01/06804 A (NOKIA NETWORKS OY ; KANERVA MIKKO (FI)) 25 January 2001 (2001-01-25) abstract; figures 1-3 page 9, line 4 - line 13 -----	1-15
A	WO 02/074000 A (QUIRKE THOMAS MICHAEL ; JEPSEN RENE PHIL (GB); MOTOROLA INC (US)) 19 September 2002 (2002-09-19) abstract; claims 1-4; figures 1,2 -----	1, 14, 15
A	WO 02/17213 A (IBM DEUTSCHLAND ; IBM (US)) 28 February 2002 (2002-02-28) abstract; claims 1,5; figures 4,6,9 page 13, line 12 - page 14, line 8 -----	1
A	GB 2 327 175 A (MERCURY PERSONAL COMMUNICATIONS LTD ; USW PCN INC (GB); MPC 92 LTD (GB) 13 January 1999 (1999-01-13) abstract; claims 1-4; figure 1 page 5, line 5 - line 34 -----	1-15
A	EP 1 161 047 A (IBM) 5 December 2001 (2001-12-05) abstract; figures 1,2,4,5 column 6, paragraph 23 - paragraph 24 -----	1-15

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PC17JP 12817

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1209930	A	29-05-2002	EP 1209930 A2	29-05-2002
WO 9959363	A	18-11-1999	US 6625135 B1	23-09-2003
			AU 751840 B2	29-08-2002
			AU 3895199 A	29-11-1999
			DE 19983163 T0	28-06-2001
			GB 2352137 A , B	17-01-2001
			JP 2002515712 T	28-05-2002
			WO 9959363 A1	18-11-1999
WO 0131945	A	03-05-2001	WO 0131945 A1	03-05-2001
			US 6748233 B1	08-06-2004
US 2002085516	A1	04-07-2002	BR 0108933 A	24-12-2002
			CA 2398185 A1	11-07-2002
			EP 1346597 A2	24-09-2003
			WO 02054820 A2	11-07-2002
WO 0106804	A	25-01-2001	WO 0106804 A1	25-01-2001
			AU 5037799 A	05-02-2001
			EP 1195073 A1	10-04-2002
			US 2002094815 A1	18-07-2002
WO 02074000	A	19-09-2002	GB 2371715 A	31-07-2002
			WO 02074000 A1	19-09-2002
			EP 1360866 A1	12-11-2003
			US 2004043772 A1	04-03-2004
WO 0217213	A	28-02-2002	AU 8398101 A	04-03-2002
			WO 0217213 A2	28-02-2002
			US 2002124101 A1	05-09-2002
GB 2327175	A	13-01-1999	NONE	
EP 1161047	A	05-12-2001	CA 2343665 A1	30-11-2001
			EP 1161047 A2	05-12-2001
			TW 519807 B	01-02-2003